

SUBJECT INDEX

- A**
- Abortion**
sex-selective
ethics of reproductive
technology and, 113
- Acclimatization**
high-altitude pulmonary
edema and, 267
- ACE inhibitors**
fatigue in congestive heart
failure and, 245, 252
- Acetylcholine**
fatigue in congestive heart
failure and, 245-46
- Achlorhydria**
carcinoid tumors and,
59-60
- Acid-base balance**
laxative abuse and, 130
- Acquired immunodeficiency
syndrome (AIDS)**
nitric oxide synthase and,
224
Pneumocystis carinii
pneumonia and, 117,
120-21
- Actinic keratosis**
ultraviolet radiation and,
186
- Action potentials**
cardiac ion channels and,
136-37, 138-39, 146
- Acute promyelocytic
leukemia (AML)**
current treatment
approaches
acquired retinoid
resistance, 559-60
adverse effects of retinoic
acid, 561-63
maintenance therapy and
duration of remission,
558-59
mechanism of retinoic
acid action, 560-61
remission induction,
556-58
introduction, 555
pathogenesis, 555-56
- Adeno-associated viruses**
gene transfer to
hematopoietic stem cells
and, 11, 16-17
- Adenosine**
myocardial preconditioning
and, 22-23, 25
Adenosine deaminase
deficiency
gene transfer to
hematopoietic stem cells
and, 16
- Adhesion molecules**
chronic inflammation and,
415-18
- Adjuvant therapy**
intermediate-thickness
melanoma and, 211, 216
- Adrenals**
Cushing's syndrome and,
443, 452, 454, 456-59
- Adrenocorticotrophic
hormone (ACTH)**
Alzheimer's disease and,
404
Cushing's syndrome and,
443-44, 446-59
nonfunctioning pituitary
tumors and, 99-101
- Africa**
hepatitis E virus and, 262
sub-Saharan
pulmonary complications
of HIV infection and, 121
- Airway sensory replacement**
nicotine addiction and,
502-3
- Alcohol**
cardiovascular diseases and
antithrombotic
mechanisms, 152
beverage choice role,
152-53
coronary heart disease,
149-53, 156
HDL cholesterol, 152
hypertension, 149, 151,
153-56
introduction, 149
public health
considerations, 156
- All-trans retinoic acid**
acute promyelocytic
leukemia and, 555-63
- Alport's syndrome**
anti-glomerular basement
membrane antibodies and,
377-85
- Alternative medicine**
remembered wellness and,
197-98
- Alveoli**
high-altitude pulmonary
edema and, 267
- Alzheimer's disease (AD)**
antiinflammatory drugs and
current potential for
treatment, 406-8
epidemiologic evidence,
403-5
inflammation, 405-6
treatment approaches,
401-2
apolipoprotein E and
apoE as genetic
susceptibility locus for
AD, 390-92
clinical age of onset
(trigger), 394-96
differential diagnosis,
395-96
etiology (anticipating
metabolism, 393-94
four stages of AD, 393-97
identification of apoE,
389-90
introduction, 387-88
is AD a disease or the
inevitable consequence of
aging, 392-93
linkage strategies
identifying apoE, 388-89
neuropathologic
diagnosis, 397-98
pathogenesis, 396-97
terminal neuropathology,
397-98
therapeutic implications
for drug targeting,
397-98
genetic classification of
dementias, 388
nitric oxide synthase and,
220, 223-24
- 4-Aminopyridine**
cardiac ion channels and,
137
- Amiodarone**
cardiac ion channels and,
140
implantable cardioverter
defibrillator and, 92
- Amphotericin B**
pulmonary complications
of HIV infection and, 122

- Anemia
 aplastic
 paroxysmal nocturnal hemoglobinuria and, 8
 Fanconi's
 gene transfer to hematopoietic stem cells and, 16
 hemolytic
 lupus anticoagulant/antiphospholipid syndrome and, 536-37
 paroxysmal nocturnal hemoglobinuria and, 1-2
- Angina
 myocardial preconditioning and, 26-27
 remembered wellness and, 193, 196
- Angiogenesis
 lipoprotein(a) and, 432-34
- Angioplasty
 myocardial preconditioning and, 22
 percutaneous
 nitric oxide in atherogenesis and, 365
- Angiotensin II
 fatigue in congestive heart failure and, 245
 myocardial preconditioning and, 21-23
- Animal models
 β -cell dysfunction in type-II diabetes and, 75
 complex diseases and, 348
 gene transfer to hematopoietic stem cells and, 13-14, 16
 lupus anticoagulant/antiphospholipid syndrome and, 544-45
 myocardial preconditioning and, 26
 nitric oxide in atherogenesis and, 370-71
- Antraquinone laxatives
 abuse of, 131-32
- Antiarrhythmic drugs
 cardiac ion channels and, 139-40
 implantable cardioverter defibrillator and, 85, 91-92
- Anticardiolipin antibodies (ACAs)
 lupus anticoagulant/antiphospholipid syndrome and, 533-45
- Anticoagulants
 endothelium and, 321-22
 lupus anticoagulant/antiphospholipid syndrome and, 545
- Antidepressants
 nicotine addiction and, 493, 502-3
- Anti-glomerular basement membrane disease
 Alport's syndrome and, 377-85
- Antiinflammatory drugs
 Alzheimer's disease and, 401-8
- Antimicrobial-resistant pathogens
 in 1990s
 enterococci, 172-74
 extended-spectrum β -lactamases, 175-77
 introduction, 169-71
Staphylococcus aureus, 175
Streptococcus pneumoniae, 169-71
- Antineutrophil cytoplasmic antibody (ANCA)-associated vasculitis
 introduction, 303-5
 other types of ANCA, 310-11
 pathogenesis, 311
 sensitivity of tests for ANCA
 necrotizing arteritis, 310
 primary pauci-immune necrotizing and crescentic glomerulonephritis, 309
 syndrome of lung hemorrhage and nephritis, 310
 Wegener's granulomatosis, 309
 specificity of tests for ANCA, 310
 syndromes associated with ANCA
 Churg-Strauss syndrome, 307
 combined ANCA and anti-GBM antibodies, 308-9
 drug-induced syndrome, 308
 microscopic polyangiitis, 306-7
 primary pauci-immune necrotizing and crescentic glomerulonephritis, 307
 pulmonary fibrosis, 308
 syndrome of lung hemorrhage and nephritis, 307-8, 310
 Wegener's granulomatosis, 305-6
 tests for ANCA, 305
 treatment of ANCA-associated conditions, 311
- Antiplatelet factors
 endothelium and, 316-19
- Antitachycardia pacing
 implantable cardioverter defibrillator and, 85
- Anxiolytics
 nicotine addiction and, 502-3
- Aplastic anemia
 paroxysmal nocturnal hemoglobinuria and, 8
- Apolipoprotein E (apoE) alleles
 Alzheimer's disease and, 387-98
- Apoptosis
 p53 gene and, 287-88
- APUDomas
 endocrine tumors of GI tract and, 57, 61
- Argentaffin
 carcinoid tumors and, 59
- Arrhythmias
 cardiac ion channels and, 135-46
- Asia
 hepatitis E virus and, 262-63
 ultraviolet radiation and, 187
- Aspirin
 lupus anticoagulant/antiphospholipid syndrome and, 545
- Asthma
 bronchial
 remembered wellness and, 193, 196-97
 fatal
 adherence factors, 163
 dyspnea perception, 162
 education, 166
 environment-related factors, 163
 ethnic and socioeconomic status, 163
 health care access, 166
 introduction, 161
 pathophysiology of fatal attack, 163-66
 patient-related factors, 162-63
 physician-related factors, 162

- prevention, 166
- prior history, 163
- psychological factors, 163
- risk factors, 162-63
- Asystole
 - implantable cardioverter defibrillator and, 88
- Atherogenesis
 - lipoprotein(a) and, 423-37
 - nitric oxide and, 365-73
- Atovaquone
 - pulmonary complications of HIV infection and, 121
- Australia
 - western
 - ultraviolet radiation and, 187
- Azithromycin
 - Bartonella* spp. and, 362
 - pulmonary complications of HIV infection and, 122

B

- Bacillary angiomatosis
 - Bartonella* spp. and, 355-57
- Backup pacing
 - implantable cardioverter defibrillator and, 85
- Bartonella* spp
 - infections and, 355-63
- Basal cell carcinoma
 - ultraviolet radiation and, 186-87
- Basic fibroblast growth factor (bFGF)
 - endocrine tumors of GI tract and, 58
- Bayes' theorem
 - diagnostic test evaluation and, 463-65
- Benzothiadiazines
 - natriuretic
 - insulinomas and, 65
- Beta blockers
 - cardiac ion channels and, 140
- β -cells
 - pancreatic
 - type-II diabetes and, 65, 69-81
- β -lactamases
 - extended spectrum
 - antimicrobial resistance and, 175-77
- Biased patient selection
 - effects
 - diagnostic test evaluation and, 467-69
- Bilateral inferior petrosal sinus sampling (BIPSS)
 - Cushing's syndrome and, 452, 454, 458
- Bile ducts
 - laparoscopic cholecystectomy
 - complications and, 35-40
- Bisacodyl
 - abuse of, 131
- Blacks
 - ultraviolet radiation and, 187
- Blockade therapy
 - nicotine addiction and, 501
- Blood vessels
 - atherosclerotic
 - cholesterol mechanisms and, 428-29
 - relaxation of
 - nitric oxide synthase and, 219-20
- Bone marrow
 - paroxysmal nocturnal hemoglobinuria and, 7
 - transplantation
 - gene transfer to hematopoietic stem cells and, 11, 14-16, 18
- Borg scale
 - fatigue in congestive heart failure and, 243
- Bowen's disease
 - ultraviolet radiation and, 186
- Bradycardia
 - implantable cardioverter defibrillator and, 85-86
- Bradykinin
 - carcinoid tumors and, 60
 - myocardial preconditioning and, 21-25
- Brain
 - nitric oxide synthase and, 222-23
- Breast cancer
 - immunotherapy of solid cancers and, 481, 487
- Breslow tumor thickness
 - intermediate-thickness
 - melanoma and, 212
- Bromocriptine
 - nonfunctioning pituitary tumors and, 102-3
- Bronchial asthma
 - remembered wellness and, 193, 196-97
- Bupropion
 - nicotine addiction and, 493, 502
- Burst pacing
 - implantable cardioverter defibrillator and, 88
- Buspirone
 - nicotine addiction and, 493, 502

C

- CAG repeats
 - disorders involving trinucleotide instability and, 205-6
- Calcitonin gene-related peptide
 - carcinoid tumors and, 61
- Calcium
 - cardiac ion channels and, 137, 140-43
- Calcium channel blockers
 - insulinomas and, 65
- Canada
 - ultraviolet radiation and, 186
- Cancer
 - gene transfer to hematopoietic stem cells and, 11
 - laparoscopic cholecystectomy
 - complications and, 41
 - p53 gene and, 285-98
 - solid
 - immunotherapy and, 481-89
 - ultraviolet radiation and, 181, 186-87, 189
- Candida* infections
 - pulmonary complications of HIV infection and, 125
- Capillary permeability
 - high-altitude pulmonary edema and, 267, 278-279
- Carbamazepine
 - manic depression and, 48
- Carbohydrates
 - insulinomas and, 65
- Carcinoid tumors
 - gastrointestinal tract and, 57, 59-62
- Cardiac ion channels
 - arrhythmia management and
 - action potentials in diseased tissues, 138-39
 - heterogeneity of cardiac action potentials, 138-39
 - individual ion channels produce ion currents, 140-42
 - introduction, 135-36
 - ion currents as targets of antiarrhythmic drug action, 139-40
 - ion-channel gene cloning, 142-46

- multiple ion currents
 - underlie action potential, 136-40
- Cardiac pacing
 - implantable cardioverter defibrillator and, 85-90
- Cardioversion
 - implantable cardioverter defibrillator and, 85, 87-88
- Carney's complex
 - Cushing's syndrome and, 444
- Carrion's disease
 - Bartonella* spp. and, 355, 357, 359
- Catheterization studies
 - Cushing's syndrome and, 451-52
- Cat-scratch disease
 - Bartonella* spp. and, 355-60, 362-63
- Caucasians
 - ultraviolet radiation and, 187
- Cell cycle arrest
 - p53 gene and, 286-87
- Cell-mediated killing
 - paroxysmal nocturnal hemoglobinuria and, 8
- Central America
 - hepatitis E virus and, 262
- Central Asian Republics
 - hepatitis E virus and, 263
- Cerebral reserve concept
 - Alzheimer's disease and, 402
- Chemoattractants
 - chronic inflammation and, 417-18
- Chemotherapy
 - gene transfer to
 - hematopoietic stem cells and, 12, 16, 18
 - immunotherapy of solid cancers and, 484
 - pulmonary complications of HIV infection and, 117, 124-25
- Chewing gum
 - nicotine addiction and, 493, 496-98, 503
- Children
 - Cushing's syndrome and, 446
 - gene transfer to
 - hematopoietic stem cells and, 15-16
 - hepatitis E virus and, 263
 - high-altitude pulmonary edema and, 272
 - nonfunctioning pituitary tumors and, 97
 - paroxysmal nocturnal hemoglobinuria and, 2
 - ultraviolet radiation and, 188-89
 - VIPomas and, 66
- Chile
 - high-altitude pulmonary edema and, 268
- Chimeric mice
 - paroxysmal nocturnal hemoglobinuria and, 7
- China
 - hepatitis E virus and, 262-63
- Cholesterol
 - delivery
 - injured blood vessels and, 428-29
- Chromophobe adenomas
 - nonfunctioning pituitary tumors and, 95
- Chromophores
 - ultraviolet radiation and, 184-85
- Churg-Strauss syndrome
 - ANCA-associated
 - vasculitis and, 303, 307
- Cigarette smoking
 - addiction and treatment, 493-503
- Ciprofloxacin
 - Bartonella* spp. and, 361-62
- Clarithromycin
 - Bartonella* spp. and, 361-62
 - pulmonary complications of HIV infection and, 122
- Clark's level of tumor
 - invasion
 - intermediate-thickness melanoma and, 212
- Clindamycin-primaquine
 - pulmonary complications of HIV infection and, 121
- Clofazimine
 - pulmonary complications of HIV infection and, 122
- Clonality
 - ion-channel gene, 142-46
 - p53 gene, 294-95
 - paroxysmal nocturnal hemoglobinuria and, 6-8
 - tumor rejection antigens and, 481-89
- Clonidine
 - nicotine addiction and, 493, 502-3
- Coccidioides immitis*
 - pulmonary complications of HIV infection and, 122
- Codeine
 - carcinoid tumors and, 61
- Complement-mediated hemolysis
 - paroxysmal nocturnal hemoglobinuria and, 1-2
- Complex disease
 - geneticist's approach to animals, 348
 - ascertainment of families and phenotypes, 342-44
 - database, 344-45
 - genetic epidemiology, 338
 - genotyping, 344-45
 - how to study complex disease, 338
 - mapping, 344-45
 - positional cloning searches, 345-48
 - specific problems with complex disease, 337-38
 - statistical analysis, 339-42
 - why study genetics of complex disease, 333-37
- Computed tomography (CT)
 - Cushing's syndrome and, 443, 452, 454
 - nonfunctioning pituitary tumors and, 98, 100
- Congestive heart failure
 - fatigue and
 - abnormal skeletal muscle, 247-49
 - commonness of fatigue, 242
 - impaired muscle blood flow, 244-46
 - introduction, 241-42
 - measurement of fatigue, 242-43
 - mechanisms of fatigue, 243-49
 - potential underlying mechanisms of peripheral adaptations, 249-52
 - reduced cardiac output, 243
 - reduced oxygen delivery, 243-44
 - therapeutic strategies for reducing muscle fatigue, 252-53
- Conserved response
 - myocardial preconditioning and, 27
- Coronary heart disease
 - alcohol and, 149-53, 156
 - remembered wellness and, 197
- Corticosteroids
 - Alzheimer's disease and, 401, 403-4, 407-8

- Cushing's syndrome and, 458-59
 lupus anticoagulant/antiphospholipid syndrome and, 545
 Corticotropin-releasing hormone (CRH)
 Cushing's syndrome and, 443, 446, 448-55
 Cortisol
 Cushing's syndrome and, 443-59
 Coumadin
 lupus anticoagulant/antiphospholipid syndrome and, 545
 C-peptide
 insulinomas and, 65
Cryptococcus neoformans
 pulmonary complications of HIV infection and, 122
 Cushing's syndrome
 biochemical diagnosis
 hypercortisolism, 445-46
 mild Cushing's syndrome distinguished from pseudo-Cushing states, 446-47
 periodic, 447
 differential diagnosis
 ACTH, 448-49, 453
 catheterization studies, 451-52
 CRH, 448-49
 CRH stimulation test, 449, 453
 dexamethasone suppression test, 449-51
 metapyrone testing, 451
 introduction, 444-45
 radiologic evaluation
 adrenals, 452, 454
 ectopic tumors, 454-55
 pituitary, 454-55
 treatment
 adrenal tumors, 456-57
 corticosteroid replacement, 458-59
 Cushing's disease, 455
 ectopic ACTH, 455-56
 medical therapy of Cushing's syndrome, 457-58
Cyclooxygenases
 Alzheimer's disease and, 401, 406-8
Cyclophosphamide
 immunotherapy of solid cancers and, 484
Cyproheptadine
 carcinoid tumors and, 61
 Cysts
 laparoscopic cholecystectomy complications and, 37, 39
 Cytokines
 Alzheimer's disease and, 405
 receptor signaling
 X-linked severe combined immunodeficiency and, 229-37
Cytomegalovirus (CMV)
 pulmonary complications of HIV infection and, 117, 122
 Cytosol
 myocardial preconditioning and, 25
- D**
- Danthron
 abuse of, 131-32
 Database
 complex diseases and, 344-45
 Decay-accelerating factor (DAF)
 paroxysmal nocturnal hemoglobinuria and, 2-4, 7
 Dehydration
 laxative abuse and, 129-30
Dentatorubropallidolusian atrophy
 trinucleotide instability and, 203, 207
 11-Deoxycortisol
 Cushing's syndrome and, 457
 Depression
 clinical trials of lithium and, 54-55
Dermatoheliosis
 ultraviolet radiation and, 185
 Developing countries
 hepatitis E virus and, 257, 259, 261 63
 Dexamethasone suppression test (DST)
 Cushing's syndrome and, 443, 446, 449-50, 458
Diabetes mellitus (NIDDM)
 type II
 genetics of complexity, 510-13
 future research, 524-25
 garden variety, 518-24
 glucose transporters, 523
 IDDM, 519-20
 inhibitors of insulin action as diabetogenes, 523-24
 insulin gene, 518-23
 insulin receptor gene mutations, 516-18
 insulin resistance syndromes, 516-18
 insulin secretion, 520
 insulin sensitivity, 520-23
 introduction, 509-13
 IRS-1, 522-23
 maturity-onset diabetes of the young, 512-15, 519
 mitochondrial gene mutations, 518
 postreceptor molecules, 523
 (pro)insulin gene, 515-16
 random genetic loci, 523
 integrated view of β -cell dysfunction in, 69, 81
 Diabetes-deafness syndromes non-insulin-dependent diabetes mellitus and, 509
Diacylglycerol (DAG)
 myocardial preconditioning and, 21, 24-25
 Diagnostic tests
 evaluation of
 Bayes' theorem, 464-65
 biased patient selection effects, 467-68
 combining results of multiple studies of test performance, 470-71
 correcting for bias in selecting patients for studies of test performance, 468-69
 does test performance depend on clinical findings, 469-70
 expressing results of test, 465-66
 gold-standard test performance, 466-67
 ideal study of test performance, 466-67
 index test performance, 466
 introduction, 463-64
 likelihood ratios, 464-65
 record results, 467
 study population identification, 466
 test performance, 464-65
Diazoxide
 insulinomas and, 65
Dilantin
 insulinomas and, 65
Diphenolic laxatives
 abuse of, 131-32
 Divalent cations
 laxative abuse and, 130

- Dofetilide
cardiac ion channels and, 137
- Dopamine agonists
nonfunctioning pituitary tumors and, 102-3
- Dopamine receptor
manic depression and, 48
- scintigraphy
nonfunctioning pituitary tumors and, 99
- Doxepin
nicotine addiction and, 502
- Doxycycline
Bartonella spp. and, 361-62
- Drug-induced syndrome
ANCA-associated vasculitis and, 308
- Drug targeting
Alzheimer's disease and, 397-98
- Duodenal ulcer
remembered wellness and, 193, 196-97
- Dyspnea
fatal asthma and, 162
fatigue in congestive heart failure and, 242-44
high-altitude pulmonary edema and, 267
- E**
- E4031
cardiac ion channels and, 137
- Ecto-ADPase
endothelium and, 321
- Ectopic tumors
Cushing's syndrome and, 454-55
- Ecuador
Bartonella spp. and, 355-57
- Edema
fatigue in congestive heart failure and, 243
high-altitude pulmonary, 267-81
- Electrocardiogram (ECG)
implantable cardioverter defibrillator and, 89, 92
- Embryo research
ethics of reproductive technology and, 111-12
- Empathy
placebo effect and, 198
- Encainide
cardiac ion channels and, 139
- End-effector
myocardial preconditioning and, 21, 25-27
- Endocrine tumors
gastrointestinal tract and carcinoid tumors, 59-62
gastrinomas, 62-64
infrequent tumors, 66-67
insulinomas, 64-65
introduction, 57-59
- Endothelial-dependent mechanisms
chronic inflammatory leukocyte recruitment and adhesion molecules in chronic inflammation, 415-18
antiinflammatory therapeutic strategies, 419-20
immunoglobulins, 417
integration of adhesion molecules and chemoattractants in leukocyte extravasation, 417-18
introduction, 413-15
mononuclear leukocyte integrins, 415-16
selectins, 416-17
therapeutic and diagnostic implications, 419-20
- Endothelium
hemostasis and, 315-29
nitric oxide in atherogenesis and, 365, 368, 371, 373
paroxysmal nocturnal hemoglobinuria and, 2
thrombosis and, 315-29
- Endothelin
myocardial preconditioning and, 21-23
- Endothelium-derived relaxing factor (EDRF)
fatigue in congestive heart failure and, 246
nitric oxide synthase and, 219
- Enkephalins
endocrine tumors of GI tract and, 58
- Enterochromaffin-like (ECL) cells
carcinoid tumors and, 60
- Enterococci
antimicrobial resistance and, 172-74
- Erythema
adverse effect of ultraviolet radiation and, 181
- Erythroid burst-forming units
gene transfer to hematopoietic stem cells and, 14
- Erythromycin
Bartonella spp. and, 361
- Ethambutol
pulmonary complications of HIV infection and, 122
- Ethics
reproductive technology and access to donor insemination by single or lesbian women, 111
allocation of collective resources, 109
commodification and commercialization, 109
embryo (zygote) research, 111-12
government as guardian of citizens' interests, 108
introduction, 107-8
in vitro fertilization in postmenopausal women, 111
justice in access, 109
overarching issues, 108-9
particular uses of reproductive technology, 109-14
sex selection for nonmedical reasons, 112-15
surrogacy, 110
- Europe
adverse effect of ultraviolet radiation and, 187
paroxysmal nocturnal hemoglobinuria and, 6
- Excitotoxicity
Alzheimer's disease and, 401, 406-7
- Exercise capacity
fatigue in congestive heart failure and, 241-46, 250-53
- Exfoliated cells
p53 gene and, 296
- Extravasation
leukocyte chronic inflammation and, 417-18
- F**
- Family collection
complex diseases and, 342-44
- Fanconi's anemia
gene transfer to hematopoietic stem cells and, 16
- Fatal asthma
overview, 161-67

- Fatigue
congestive heart failure
and, 241
- Fatty acid-binding protein
non-insulin-dependent
diabetes mellitus and, 509
- D-Fenfluramine
nicotine addiction and, 502
- Fertility
ethical issues and, 107-15
- Fetal loss
recurrent
lupus anticoagulant/
antiphospholipid
syndrome and, 533-34,
536, 538-41, 543-45
- Fibrillation
ventricular
implantable cardioverter
defibrillator and, 85-87,
90
- Fibrin
inhibition of
plasminogenesis and, 429
- Fibrinolytic factors
endothelium and, 323
- Flecainide
cardiac ion channels and,
139
- Florinef
Cushing's syndrome and,
459
- Fluorocholangiography
laparoscopic
cholecystectomy
complications and, 37
- 5-Fluorouracil (5-FU)
gene transfer to
hematopoietic stem cells
and, 14
- Fluoxetine
nicotine addiction and, 502
- Follicle-stimulating hormone
(FSH)
nonfunctioning pituitary
tumors and, 95, 97-98,
100, 103
- Fragile X syndrome
trinucleotide instability
and, 202-4, 207-8
- France
Bartonella spp. and, 362
FRAXE mental retardation
trinucleotide instability
and, 203-4
- Fungal infections
pulmonary complications
of HIV infection and,
117, 122
- G
Gallstones
- laparoscopic
cholecystectomy
complications and, 40
- Gamma globulin
gene transfer to
hematopoietic stem cells
and, 17
- lupus
anticoagulant/antiphospholi
pid syndrome and, 545
- Ganglioneuromas
endocrine tumors of GI
tract and, 66
- Gastrinomas
gastrointestinal tract and,
57-58, 62-64
- Gastrointestinal (GI) tract
endocrine tumors and,
57-67
- Gene gun techniques
ballistic, 489
- Gene-targeted mice
paroxysmal nocturnal
hemoglobinuria and, 7
- Genetic epidemiology
complex diseases and,
338-39
- Genetic susceptibility loci
Alzheimer's disease and,
390-92
- Gene transfer
endothelium and, 328-29
- Gentamicin
Bartonella spp. and,
361-62
- Germline mutations
p53 and, 289
- Ghana
hepatitis E virus and, 261
- Glucagon
insulinomas and, 65
non-insulin-dependent
diabetes mellitus and, 509
- Glucagonomas
GI tract and, 57, 66
- Glucocorticoids
Alzheimer's disease and,
401, 403-5, 407
Cushing's syndrome and,
443-46, 449, 458-59
insulinomas and, 65
- Glucokinase mutations
non-insulin-dependent
diabetes mellitus and, 509
- Glucose
 β -cell dysfunction in
type-II diabetes and,
70-72, 76-79
insulinomas and, 65
- Glucose (GLUT) transporters
non-insulin-dependent
diabetes mellitus and, 80,
- 523
- Glycogen synthase
non-insulin-dependent
diabetes mellitus and, 509
- Glycophosphatidylinositol
(GPI)
anchor synthesis
paroxysmal nocturnal
hemoglobinuria and, 1-4,
8
- Glycoproteins
gene transfer to
hematopoietic stem cells
and, 18
nonfunctioning pituitary
tumors and, 95, 97, 99,
103
- Gold-standard test
diagnostic test evaluation
and, 466-67
- Gonadotroph adenomas
nonfunctioning pituitary
tumors and, 99-100
- Gonadotrophin-releasing
hormone (GnRH)
nonfunctioning pituitary
tumors and, 96, 103
- Goodpasture's syndrome
Alport's syndrome and,
377-85
ANCA-associated
vasculitis and, 307-8, 310
- G proteins
myocardial preconditioning
and, 23, 25
- Graft purging methods
gene transfer to
hematopoietic stem cells
and, 15
- Granulocyte
colony-stimulating factor
(G-CSF)
gene transfer to
hematopoietic stem cells
and, 16
- Granulocyte macrophage
colony-forming units
gene transfer to
hematopoietic stem cells
and, 14
- Growth factors
endocrine tumors of GI
tract and, 57-58
gene transfer to
hematopoietic stem cells
and, 15
- Growth hormone (GH)
nonfunctioning pituitary
tumors and, 99-101
- H
Haemophilus influenzae

- pulmonary complications
 - of HIV infection and, 119
- Hasson port
 - laparoscopic cholecystectomy complications and, 34
- Haw River syndrome
 - trinucleotide instability and, 203, 207
- Hematopoietic stem cells
 - gene transfer to
 - adeno-associated virus gene transfer, 11, 16–17
 - animal models, 14
 - clinical studies, 15–16
 - human in vitro data, 14
 - improving gene transfer efficiency, 18
 - introduction, 11–12
 - retroviral gene transfer, 12–16
 - retroviral vector production, 12–13
 - paroxysmal nocturnal hemoglobinuria and, 1–2, 7–8
- Hemolytic anemia
 - lupus anticoagulant/antiphospholipid syndrome and, 536–37
 - paroxysmal nocturnal hemoglobinuria and, 1–2
- Hemorrhage
 - laparoscopic cholecystectomy complications and, 31, 40
- Hemostasis
 - endothelium and, 315–29
- Heparin
 - carcinoid tumors and, 61
 - lupus anticoagulant/antiphospholipid syndrome and, 545
- Heparin sulfate
 - endothelium and, 322–23
- Hepatitis E virus (HEV)
 - clinical features and, 258–59
 - diagnostic tests and, 259–60
 - epidemiology and, 262–63
 - immunity and, 260–62
 - pathogenesis and, 260–62
 - prevention and, 263–64
 - virology and, 257–58
- Hepatocystic triangle
 - laparoscopic cholecystectomy complications and, 35–36
- HERG* gene
 - cardiac ion channels and, 144–45
- Herpes simplex
 - remembered wellness and, 193, 196–97
- High-altitude pulmonary edema (HAPE)
 - altitude of occurrence, 272
 - basic mechanisms, 274–75
 - capillary permeability, 278–79
 - clinical features, 268–69
 - definition, 270
 - gender distribution, 272–73
 - hemodynamic values, 274
 - historical notes, 268
 - incidence, 272
 - introduction, 267
 - mortality, 273
 - overperfusion concept, 275–76
 - pathology, 274
 - physiologic characteristics, 273
 - prevention, 280
 - pulmonary vascular obstruction by thrombi, 278
 - pulmonary venous obstruction, 276–78
 - radiologic features, 269–71
 - reentry HAPE, 273
 - sea level analogues, 278
 - severity classification, 270
 - susceptibility, 272
 - treatment, 279–80
- High-density lipoprotein (HDL) cholesterol
 - alcohol relationship to cardiovascular disease and, 152
- Histamine blockers
 - Alzheimer's disease and, 405–7
 - carcinoid tumors and, 59, 61
 - gastrinomas and, 63–64
- Histocompatibility antigen
 - non-insulin-dependent diabetes mellitus and, 509
- Histoplasma capsulatum*
 - pulmonary complications of HIV infection and, 122
- Homeopathy
 - placebo effect and, 198
- Human immunodeficiency virus (HIV)
 - gene transfer to hematopoietic stem cells and, 11
 - lupus anticoagulant/antiphospholipid syndrome and, 538
 - nitric oxide synthase and, 224
- Pneumocystis carinii*
 - pneumonia and, 117, 120–21
- pulmonary complications
 - of
 - bacterial pneumonia, 119
 - chemoprophylaxis, 124–25
 - epidemiology, 118–19
 - fungal infections, 122
 - infectious complications, 119–22
 - interstitial pneumonias, 124
 - introduction, 117–18
 - Kaposi's sarcoma, 123
 - non-Hodgkin's lymphoma, 124
 - noninfectious disorders, 123–24
 - nontuberculous mycobacterial infections, 122
 - tuberculosis, 121–22
 - viral infections, 122
- Huntington's disease
 - nitric oxide synthase and, 220, 223
 - trinucleotide instability and, 203, 206
- Hydrazaline
 - ANCA-associated vasculitis and, 308
- Hydrocortisone
 - Alzheimer's disease and, 407
 - Cushing's syndrome and, 459
- 11 β -Hydroxylase
 - Cushing's syndrome and, 457
- 17-Hydroxysteroid
 - Cushing's syndrome and, 445, 449–50
- 5-Hydroxytryptophan
 - carcinoid tumors and, 59–61
- Hypercarbia
 - laparoscopic cholecystectomy complications and, 33–34
- Hyperglycemia
 - chronic
 - β -cell dysfunction in type-II diabetes and, 74–78
- Hyperinflation
 - fatal asthma and, 161
- Hyperinsulinism
 - insulinomas and, 65
- Hypertension
 - alcohol and, 149, 151, 153–56

Hypoglycemia
fasting
insulinomas and, 64-65

Hypokalemia
laxative abuse and, 130

Hypoxic pulmonary
vasoconstriction
high-altitude pulmonary
edema and, 267

I

Imidazoles
pulmonary complications
of HIV infection and,
122, 125

Immune response
gene transfer to
hematopoietic stem cells
and, 11, 16
hepatitis E virus and,
260-62
ultraviolet radiation and,
181-83

Immunoglobulins
chronic inflammation and,
417

Immunotherapy
solid cancers and
identification of genes
encoding tumor antigens,
485-87
IL-2, 482-85
introduction, 481-82
opportunities for
development of new
cancer therapies, 487-89
tumor-infiltrating
lymphocytes, 482-85

Implantable cardioverter
defibrillator
complications, 90-91
detection of ventricular
tachycardia/ventricular
fibrillation, 87
implant and followup,
90-91
introduction, 85-86
survival impact, 91-92
therapies, 87-90

Implantation
sex-selective
ethics of reproductive
technology and, 113

Incidentally discovered mass
nonfunctioning pituitary
tumors and, 100-2

Index arrhythmic event
implantable cardioverter
defibrillator and, 91

Index test

diagnostic test evaluation
and, 466

India
hepatitis E virus and, 261,
263

high-altitude pulmonary
edema and, 268, 273
pulmonary complications
of HIV infection and, 121

Indomethacin
Alzheimer's disease and,
408

Infarct size
myocardial preconditioning
and, 21, 24

Infections
antimicrobial resistance
and, 169-77
Bartonella spp. and,
355-63

Inflammation
Alzheimer's disease and,
401, 405-6
endothelium and, 413-20
lipoprotein(a) and, 434-35

Influenza
pulmonary complications
of HIV infection and, 125

Inhalers
nicotine addiction and,
493, 500

Inherited disorders
human
trinucleotide instability
and, 201-8

Inositol depletion
hypothesis
of lithium action, 47-55

Insemination
sex-selective
ethics of reproductive
technology and, 113-15

Insertional mutagenesis
gene transfer to
hematopoietic stem cells
and, 12-13

Insulin
 β -cell dysfunction in
type-II diabetes and,
70-73, 79-80
gene

non-insulin-dependent
diabetes mellitus and,
516-23

Insulin-dependent diabetes
mellitus (IDDM)
non-insulin-dependent
diabetes mellitus and,
519-20

Insulin-like growth factor 1
(IGF-1)
endocrine tumors of GI

tract and, 58

Insulinomas
gastrointestinal tract and,
64-65

Insulin receptor substrate-1
non-insulin-dependent
diabetes mellitus and,
509, 522-23

Insulin resistance
syndromes
non-insulin-dependent
diabetes mellitus and,
509, 516-18

Integrins
mononuclear leukocyte,
415-16

Interleukins
Alzheimer's disease and,
405

gene transfer to
hematopoietic stem cells
and, 15
immunotherapy of solid
cancers and, 481-85

X-linked severe combined
immunodeficiency and,
229-31

Interstitial pneumonias
pulmonary complications
of HIV infection and, 124

Intracellular signaling
myocardial preconditioning
and, 23, 27

Inverted-terminal repeat
sequences
gene transfer to
hematopoietic stem cells
and, 17

In vitro fertilization
postmenopausal women
and, 111

Ion channels
cardiac, 135-46

Ionic events
 β -cell dysfunction in
type-II diabetes and, 80
Ischemic preconditioning
heart disease and, 21-27

Isoniazid
pulmonary complications
of HIV infection and, 121

J

Jak3 tyrosine kinase
X-linked severe combined
immunodeficiency and,
235

Japan
paroxysmal nocturnal
hemoglobinuria and, 6

K

- K⁺ATP channel
 - myocardial preconditioning and, 25
- Kaposi's sarcoma
 - pulmonary complications of HIV infection and, 117, 123
- Kashmir
 - hepatitis E virus and, 261
- Kennedy's disease
 - trinucleotide instability and, 203, 206
- Ketoconazole
 - Cushing's syndrome and, 456-57
- Kidney failure
 - laxative abuse and, 130
- Knockout mice
- nNOS
 - nitric oxide synthase and, 225

L

- Laparoscopic
 - cholecystectomy
 - complications of
 - arterial injury, 40
 - bile duct injury, 35-40
 - conversion to open operation, 40-41
 - emergence of laparoscopy, 31-32
 - gallstone spillage, 40
 - general complications, 33-35
 - institutional results, 41
 - instrumentation, 34-35
 - large clinical series, 41-42
 - limitations of existing technology, 32-33
 - metastasis, 35
 - patient outcomes, 41-42
 - patient selection, 33
 - pneumoperitoneum, 34
 - port placement, 33-34
 - postoperative care, 41
 - specific complications, 35-41
 - thermal injury, 34-35
 - trocar site herniation, 35
- Laxative abuse
 - complications of
 - acid-base balance disturbance, 130
 - anthraquinones, 132
 - assessment and management, 132-33
 - dehydration, 129-30
 - diphenolic laxatives,

- 131-32
- divalent cation disturbance, 130
- gastrointestinal effects, 129
- habitual abuse, 128
- hypokalemia, 130
- iatrogenic complications, 131
- introduction, 127
- nonspecific complications, 129-31
- renal failure, 130
- social complications, 131
- sodium depletion, 129-30
- specific complications, 131-32
- surreptitious abuse, 128-29
- types, 128-29
- Lesbian women
 - access to donor insemination by, 111
- Leukocytes
 - endothelium and, 413-20
 - nitric oxide in atherogenesis and, 365, 368, 370, 373
- Likelihood ratios
 - diagnostic test evaluation and, 464-65
- Linkage strategies
 - apolipoprotein E
 - identification and, 388-89
- Lipoprotein(a) [Lp(a)]
 - atherosclerosis and cholesterol delivery to injured blood vessels, 428-29
 - epidemiology, 426-27
 - inflammation, 434-35
 - plasmin generation
 - impaired on cell surfaces, 430-31
 - plasminogen gene family and angiogenesis, 432-34
 - plasminogenesis
 - inhibition on fibrin, 429
 - potential mechanisms, 427-32
 - therapy of elevated Lp(a) levels, 435-36
 - unresolved issues, 436-37
 - vascular cell proliferation
 - induction, 431-32
 - heterogeneity, 424-26
 - introduction, 423-24
- Lithium (Li)
 - manic depression and clinical trials of inositol in depression, 54-55
 - difficulties with inositol

- theory of Li action, 51
- inositol overview, 48-49
- inositol reverses
 - Li-pilocarpine seizures, 49-50
- inositol supplementation
 - effect on Li-induced polyuria-polydipsia, 52-53
- lithium overview, 47-48
- mood stabilizers, 48
- pharmacodynamics of inositol effects, 53
- toxicity and lethality of lithium, 50
- Long QT syndrome
 - cardiac ion channels and, 140-41, 144-45
- Long-term potentiation
 - nitric oxide synthase and, 219, 222
- Low-density lipoprotein (LDL)
 - nitric oxide in atherogenesis and, 369, 373
- Lung hemorrhage
 - ANCA-associated vasculitis and, 307-8, 310
- Lupus anticoagulant/antiphospholipid syndrome
 - clinical manifestations, 536-39
 - detection and prevalence, 534-36
 - experimental models, 544-45
 - hemostatic abnormalities, 539-40
 - introduction, 533-34
 - mechanisms, 540-44
 - treatment, 545
- Luteinizing hormone (LH)
 - nonfunctioning pituitary tumors and, 95, 97-98, 100, 103
- Lymph nodes
 - intermediate-thickness melanoma and, 211, 215
- Lymphoma
 - pulmonary complications of HIV infection and, 117

M

- Machado-Joseph disease
 - trinucleotide instability and, 203, 206
- Macrophages
 - activated
 - nitric oxide synthase and, 219

- Magnesium sulphate
abuse of, 131
- Magnetic resonance imaging (MRI)
Cushing's syndrome and, 443, 452, 454
nonfunctioning pituitary tumors and, 98, 100-1
- Manic depression
lithium and, 47-55
- Mapping
complex diseases and, 344-45
- Marker genes
gene transfer to
hematopoietic stem cells and, 14-15
- Maturity-onset diabetes of the young (MODY)
genetics of, 509, 512-15, 519
- MDR vector
gene transfer to
hematopoietic stem cells and, 18
- Mecamylamine
nicotine addiction and, 501
- Melanoma
intermediate-thickness
follow-up program, 216
introduction, 212
lymph nodes, 215
primary tumor
management, 213-14
prognostic factors, 212-13
survival rates, 214
lentigo maligna
ultraviolet radiation and, 187
malignant
ultraviolet radiation and, 187
metastatic
immunotherapy of solid cancers and, 481-86, 488-89
- Membrane attack complex
Alzheimer's disease and, 406
- Membrane cofactor protein (MCP)
paroxysmal nocturnal hemoglobinuria and, 2
- Mental health care system
de facto
epidemiology of
psychiatric disorders and, 473-78
- Metabolism
Alzheimer's disease and, 393-94, 401
glucose
 β -cell dysfunction in
type-II diabetes and, 80
- Metapyrone
Cushing's syndrome and, 451, 457
- Metastasis
immunotherapy of solid cancers and, 481-86, 488-89
laparoscopic
cholecystectomy
complications and, 35
- Methotrexate
Alzheimer's disease and, 403
- Methysergide
carcinoid tumors and, 61
- Metoprolol
implantable cardioverter
defibrillator and, 92
- Mexico
hepatitis E virus and, 259
- Middle East
hepatitis E virus and, 262
- Mifepristone
Cushing's syndrome and, 458
- Mineralocorticoids
Cushing's syndrome and, 459
- Minimal residual disease
p53 gene and, 296-97
- Missense mutations
paroxysmal nocturnal
hemoglobinuria and, 7
- Mitochondrial genes
non-insulin-dependent
diabetes mellitus and, 509, 518
- Mitomycin C
gene transfer to
hematopoietic stem cells and, 16
- Mitotane
Cushing's syndrome and, 444, 455-58
- Mononuclear leukocyte
integrins
chronic inflammation and, 415-16
- Multiple endocrine neoplasia (MEN)
GI tract and, 57-58, 62-64, 66
- Multistep model of
tumorigenicity
paroxysmal nocturnal
hemoglobinuria and, 8
- Muscle strength and
endurance
fatigue in congestive heart
failure and, 241-53
- Myanmar
hepatitis E virus and, 259
- Mycobacterium*
avium-complex (MAC)
infection
disseminated
pulmonary complications
of HIV infection and, 117, 122
- Mycobacterium* spp.
pulmonary complications
of HIV infection and, 121-22
- Myeloperoxidase
ANCA-associated
vasculitis and, 303, 312
- Myocardial infarction
acute
alcohol and, 150-51
- Myocardial preconditioning
ischemic heart disease and
adenosine, 22-23
clinical use, 26-27
early observations, 22
end-effector, 25-26
introduction, 21-22
phospholipase C, 23-25
phospholipase D, 23-25
protein kinase C, 23-26
- Myotonic dystrophy
trinucleotide instability
and, 204-5, 207
- N
- NADPH diaphorase
nitric oxide synthase and, 219-20, 225
- Naked DNA
immunotherapy of solid
cancers and, 489
- Nasal sprays
nicotine addiction and, 493, 496, 499
- Necrotizing arteritis
ANCA-associated
vasculitis and, 310
- Nelson's syndrome
Cushing's syndrome and, 455
- Neointimal proliferation
nitric oxide in
atherogenesis and, 365, 373
- Nepal
high-altitude pulmonary
edema and, 272
- Nephritis
ANCA-associated
vasculitis and, 307-8, 310
- Nerve growth factor (NGF)
endocrine tumors of GI
tract and, 58

- Nesioblastosis
 insulinomas and, 65
 Neuroblastomas
 GI tract and, 66
 Neurokinin A
 carcinoid tumors and,
 60-61
 Neuropathology
 terminal
 Alzheimer's disease and,
 397-98
 Neuropeptide K
 carcinoid tumors and, 61
 Neurotensin
 endocrine tumors of GI
 tract and, 58
 Nevi
 ultraviolet radiation and,
 187
 New Zealand
 fatal asthma and, 167
 Nicotine addiction
 treatment and
 airway sensory
 replacement, 502
 antidepressants, 502
 blockade therapy, 501
 clonidine, 502
 combination therapies,
 500-1
 future of nicotine
 replacement, 499-501
 inhaler, 500
 introduction, 493-94
 nasal spray, 499
 nicotine reinforcement of
 smoking behavior,
 494-95
 non-nicotine factors
 affecting cigarette
 smoking, 495-96
 other investigational
 treatments, 501-2
 pharmacologic basis of
 cigarette smoking,
 494-96
 serotonergic treatments,
 502
 smoking cessation
 treatment, 496-502
 Nifedipine
 high-altitude pulmonary
 edema and, 267
 Nitric oxide (NO)
 endothelium and, 319-20
 fatigue in congestive heart
 failure and, 245-46
 limits atherogenesis
 animal models, 370-71
 biochemistry of NO,
 366-67
 endothelium, 371
 introduction, 365-66
 leukocytes, 370
 lipid/NO interactions in
 vessel wall, 369
 nitric oxide synthases,
 366-67
 platelets, 369-70
 reactivity, 366
 smooth muscle cells, 370
 strategies for therapeutic
 modulation of NO
 production and
 responsiveness, 372-73
 vascular biology of NO,
 367
 vascular injury, 371-72
 Nitric oxide synthase (NOS)
 biosynthesis and, 220-21
 introduction, 219-20
 neurotoxicity and, 223-24
 physiologic effects in brain
 and endocrine systems,
 222-23
 targeted disruption of
 neuronal NOS gene, 225
 Non-Hodgkin's lymphoma
 pulmonary complications
 of HIV infection and, 124
 Non-insulin-dependent
 diabetes mellitus
 (NIDDM) type II
 β -cell dysfunction and
 animal models, 75-78
 biochemistry of
 glucose-induced insulin
 secretion, 78-79
 chronic hyperglycemia,
 74-78
 glucose desensitization
 vs. glucose toxicity,
 76-78
 glucose-induced insulin
 secretion, 70-72
 glucose metabolism and
 ionic events, 80
 glucose phosphorylation,
 80
 glucose transport, 80
 human models, 70-75
 intracellular defects,
 78-80
 introduction, 69-70
 nonglucose-induced
 insulin secretion, 72
 patient studies, 74-75
 proinsulin levels, 73-74
 pulsatility of insulin
 secretion, 72-73
 Nonsteroidal
 antiinflammatory drugs
 (NSAIDs)
 Alzheimer's disease and,
 401, 403-8
 Nonthoracotomy systems
 implantable cardioverter
 defibrillator and, 85,
 90-92
 Norepinephrine
 fatigue in congestive heart
 failure and, 245
 myocardial preconditioning
 and, 23, 25
 North America
 Bartonella spp. and, 355,
 363
 NOS gene
 neuronal
 targeted disruption of,
 225
 Null cell adenomas
 nonfunctioning pituitary
 tumors and, 99-100
- O**
- Octreotide
 Cushing's syndrome and,
 455-56
 endocrine tumors of GI
 tract and, 57, 61, 63-65
 nonfunctioning pituitary
 tumors and, 99, 103
 Omeprazole
 gastrinomas and, 63
 Oncocytomas
 nonfunctioning pituitary
 tumors and, 99-100
 1-8J shock
 implantable cardioverter
 defibrillator and, 87, 89
 Opioids
 carcinoid tumors and, 61
 Oroya fever
 Bartonella spp. and, 355,
 357, 359
 Osmotic laxatives
 abuse of, 131
 Ovarian cancer
 immunotherapy of solid
 cancers and, 481, 487
 Overperfusion concept
 high-altitude pulmonary
 edema and, 275-76
 Oxidative stress
 Alzheimer's disease and,
 401
 Oxygen
 fatigue in congestive heart
 failure and, 243-44, 247
 high-altitude pulmonary
 edema and, 241, 267
 Oxyphenisatin
 abuse of, 131

Ozone layer
reduction
ultraviolet radiation and,
189

P

p53 tumor suppressor gene
altered p53 in cancer
assessment of p53 status
in human cells, 290-91
functional tests, 290-91
germline mutations in
p53, 289
immunohistochemistry,
290
p53 gene lesions in
human cancer, 288-93
sporadic cancer, 288-89
tumor mutation patterns,
291-93
diagnostics
exfoliated cells, 296
minimal residual disease,
296-97
serum antibodies, 297
functions of normal
cancer-inhibiting
functions, 286-88
cell cycle arrest, 286-87
cellular control of p53
activity, 288
programmed cell death,
287-88
neoplastic development
alternative modes of p53
inactivation, 295-96
clonality, 294-95
prognosis, 294
timing, 293-94
therapeutic opportunities,
297-98
Pacemakers
implantable cardioverter
defibrillator and, 88
Parenchymal peliosis
Bartonella spp. and,
355-57
Paroxysmal nocturnal
hemoglobinuria (PNH)
phosphatidylinositol-linked
proteins in pathogenesis of
disorder, 2
clonality, 6-8
complement-mediated
hemolysis, 2
GPI-anchor synthesis, 2-4
hematopoietic stem cells,
2
PIG-A gene, 4-8
somatic mutations, 6

Parvoviruses
gene transfer to
hematopoietic stem cells
and, 16
Passaro's "gastrinoma
triangle"
endocrine tumors of GI
tract and, 62
PC-1
non-insulin-dependent
diabetes mellitus and,
509, 524
Pentagastrin
gastrinomas and, 63
Pentamidine
pulmonary complications
of HIV infection and, 120
Percutaneous transhepatic
venous sampling (PTVS)
endocrine tumors of GI
tract and, 64-65
Peripheral adaptations
fatigue in congestive heart
failure and, 241, 249-52
Peripheral blood
mononuclear cells
gene transfer to
hematopoietic stem cells
and, 16
Peru
Bartonella spp. and,
355-56
high-altitude pulmonary
edema and, 268, 272-73
Phenolphthalein
abuse of, 131
Phenothiazines
carcinoid tumors and, 61
lupus anticoagulant/
antiphospholipid
syndrome and, 538
Phenotype
complex diseases and,
342-44
gene transfer to
hematopoietic stem cells
and, 11-12
paroxysmal nocturnal
hemoglobinuria and, 5
Phenylephrine
myocardial preconditioning
and, 21
Phenytoin
manic depression and, 48
Phorbol esters
myocardial preconditioning
and, 23
Phosphatidylinositol
myocardial preconditioning
and, 24
Phosphatidylinositol-linked
proteins

paroxysmal nocturnal
hemoglobinuria and, 1-3,
5-8
Phospholipases
myocardial preconditioning
and, 21, 23-25
Phosphorylation
glucose
 β -cell dysfunction in
type-II diabetes and, 80
myocardial preconditioning
and, 21, 25
Photoaging
ultraviolet radiation and,
181, 185, 189
Photosensitivity disorders
ultraviolet radiation and,
181, 183-84, 185, 189
Physical activity
fatigue in congestive heart
failure and, 241, 252
PIG-A gene
paroxysmal nocturnal
hemoglobinuria and, 1,
4-8
Pilocarpine
lithium and, 49-50
Pituitary
Cushing's syndrome and,
443-44, 54-55
nonfunctioning tumors
clinical manifestations, 96
computed tomography, 98
diagnosis, 96
differential diagnosis,
100-2
dopamine agonists, 102-3
dopamine receptor
scintigraphy, 99
endocrine manifestations,
97-100
GnRH agonists and
antagonists, 103
imaging, 98-99
introduction, 95-96
management, 102-3
MRI, 98
neurologic symptoms, 96
pathology, 99-100
problem of incidentally
discovered mass, 100-2
somatostatin analogues,
103
somatostatin receptor
scintigraphy, 99
surgery, 102
Placebo effect
remembered wellness and,
193-98
Plasmin
cell surfaces and, 430-31
fibrin and, 429

- Plasminogen family genes
lipoprotein(a) and, 432-34
- Platelet-derived growth factor (PDGF)
endocrine tumors of GI tract and, 58
- Platelets
endothelium and, 316-19
nitric oxide in atherogenesis and, 365, 368-70, 373
- Pneumocystis carinii*
pneumonia
pulmonary complications of HIV infection and, 117, 119-21
- Pneumoperitoneum
laparoscopic cholecystectomy complications and, 34
- Poly-ADP-ribose synthetase
nitric oxide synthase and, 219
- Polyangiitis/polyarteritis
microscopic
ANCA-associated vasculitis and, 303, 306-7
- Polydipsia/polyurea
Li-induced
inositol supplementation effect on, 52-53
- Polymerase chain reaction (PCR)
reverse
paroxysmal nocturnal hemoglobinuria and, 4
semiquantitative gene transfer to hematopoietic stem cells and, 17
- Polymorphous light eruption
ultraviolet radiation and, 185
- Porphyrias
ultraviolet radiation and, 184
- Positional cloning searches
complex diseases and, 345-48
- Postmenopause
in vitro fertilization and, 111
- Postreceptor molecules
non-insulin-dependent diabetes mellitus and, 523
- Potassium
cardiac ion channels and, 140-42
- PPomas
GI tract and, 66-67
- Precapillary resistance
high-altitude pulmonary edema and, 267
- Preconception arrangements
commercial
ethics of reproductive technology and, 110
- Prednisone
Alzheimer's disease and, 408
pulmonary complications of HIV infection and, 121
- Pregnancy
hepatitis E virus and, 257-59, 262
lupus anticoagulant/antiphospholipid syndrome and, 533-34, 536, 538-41, 543-45
- Primary pauci-immune
necrotizing and crescentic glomerulonephritis
ANCA-associated vasculitis and, 303, 307, 309
- Programmable tiered therapy
implantable cardioverter defibrillator and, 85-87
- Programmed cell death
p53 gene and, 287-88
- Proinsulin
non-insulin-dependent diabetes mellitus and, 65, 73-74, 515-16
- Prolactin
nonfunctioning pituitary tumors and, 99-101
- Propafenone
implantable cardioverter defibrillator and, 92
- Propranolol
insulinomas and, 65
- Propylthiouracil
ANCA-associated vasculitis and, 308
- Prostacyclin
endothelium and, 316-19
- Prostaglandins
carcinoid tumors and, 60
endothelium and, 320-21
- Prostate cancer
immunotherapy of solid cancers and, 487
- Protein kinase C (PKC)
myocardial preconditioning and, 21, 23-27
- Proteinase 3
ANCA-associated vasculitis and, 303, 312
- Protein S
endothelium and, 322
- Pseudo-Cushing states
Cushing's syndrome and, 443, 446-47
- Pseudomonas aeruginosa*
pulmonary complications of HIV infection and, 119
- Psychiatric disorders
epidemiology of disorders in general health care setting, 475-76
introduction, 473-74
overview of mental disorders in community, 474-75
treatment and de facto system, 476-77
- Public health considerations
alcohol relationship to cardiovascular disease and, 156
- Pulmonary complications
ANCA-associated vasculitis and, 308
fatigue in congestive heart failure and, 243
high-altitude pulmonary edema and, 267, 276-78
HIV and, 117-25
- Pulsatility
 β -cell dysfunction in type-II diabetes and, 72-73
Cushing's syndrome and, 446
- ## Q
- Quality of life
fatigue in congestive heart failure and, 241-42
- Quinidine
cardiac ion channels and, 137
- Quinolones
pulmonary complications of HIV infection and, 122
- ## R
- Radiation therapy
Cushing's syndrome and, 444
- Radiologic evaluation
Cushing's syndrome and, 452, 454-55
high-altitude pulmonary edema and, 269-71
- Rad protein
non-insulin-dependent diabetes mellitus and, 509, 524
- Ramp pacing
implantable cardioverter defibrillator and, 88-89

Recombinant viruses
immunotherapy of solid
cancers and, 481
Reflex mechanisms
fatigue in congestive heart
failure and, 241
Remembered wellness
harnessing power of
placebo effect and
alternative medicine,
197-98
evidence of placebo
effect's power, 196-97
introduction, 193-95
placebo effect revisited,
198
"remembered wellness"
as new term in place of
"placebo effect", 198
Renal cell cancer
metastatic
immunotherapy of solid
cancers and, 482-84
Reperfusion
myocardial preconditioning
and, 21, 24
Reproduction
ethical issues and, 107-15
Restenosis
nitric oxide in
atherogenesis and, 365
Retinoic acid receptor
nuclear
acute promyelocytic
leukemia and, 555-63
Retroviruses
gene transfer to
hematopoietic stem cells
and, 11-16
Reverse transcription
gene transfer to
hematopoietic stem cells
and, 13
Rhodococcus equi
pulmonary complications
of HIV infection and, 119
Rifabutin
Bartonella spp. and, 362
pulmonary complications
of HIV infection and,
122, 125
Rifampin
Bartonella spp. and,
361-62
pulmonary complications
of HIV infection and, 121
Risk factor intervention
Alzheimer's disease and,
401
r-N⁶-(2-phenylisopropyl)aden
osine (PIA)
myocardial preconditioning

and, 24
Rochalimaea spp
infections and, 355-63
RU 486
Cushing's syndrome and,
458
S
SCN5A gene
cardiac ion channels and,
144
Secretin
gastrinomas and, 63-64
Selectins
chronic inflammation and,
416-17
Senna glycosides
abuse of, 131-32
Serotonergic drugs
nicotine addiction and,
493, 502-3
Serotonin
carcinoid tumors and,
59-60
Serotonin reuptake inhibitors
manic depression and, 48
Severe combined
immunodeficiency (SCID)
gene transfer to
hematopoietic stem cells
and, 16
Sex selection
ethics of reproductive
technology and, 112-15
Sexual behavior
nitric oxide synthase and,
219
Shaker superfamily
cardiac ion channels and,
140-42, 145
Sick quitter hypothesis
coronary heart disease and,
151
Signal transduction
Alzheimer's disease and,
406
myocardial preconditioning
and, 23, 27
nitric oxide in
atherogenesis and, 365,
368, 373
nitric oxide synthase and,
219
Single women
access to donor
insemination by, 111
Sinus rhythm
implantable cardioverter
defibrillator and, 88-89
Skeletal muscle

fatigue in congestive heart
failure and, 241, 247-49
Skin cancer
ultraviolet radiation and,
181, 186-87, 189
Skin patches
nicotine addiction and, 493,
495-99, 501, 503
Smooth muscle cells
nitric oxide in
atherogenesis and, 365,
368, 370
Sodium
cardiac ion channels and,
137, 140-42, 144
laxative abuse and, 129-30
cardiac ion channels and,
139
Sodium sulphate
abuse of, 131
Somatic mutations
paroxysmal nocturnal
hemoglobinuria and, 1,
6-7
Somatostatin
carcinoid tumors and, 62
receptor scintigraphy
nonfunctioning pituitary
tumors and, 99
Somatostatinomas
GI tract and, 57-58, 66
Sotalol
implantable cardioverter
defibrillator and, 92
Southeast Asia
pulmonary complications
of HIV infection and, 121
Soviet Union
former
hepatitis E virus and, 263
Spinal bulbar muscular
dystrophy
trinucleotide instability
and, 203, 206
Spinocerebellar ataxias
trinucleotide instability
and, 203, 206
Squamous cell carcinoma
adverse effect of ultraviolet
radiation and, 186-87
SS-1 cells
paroxysmal nocturnal
hemoglobinuria and, 4-5
Staphylococcus aureus
antimicrobial resistance
and, 175
Statistical analysis
complex diseases and,
339-42
Staurosporine
myocardial preconditioning
and, 24

- Stem cells
 hematopoietic
 gene transfer and, 11-18
 paroxysmal nocturnal hemoglobinuria and, 1-2, 7-8
 totipotent
 endocrine tumors of GI tract and, 58
Streptococcus pneumoniae
 antimicrobial resistance and, 169-71
 pulmonary complications of HIV infection and, 119
 Streptozotocin
 PPomas and, 67
 Stress reduction
 alcohol relationship to cardiovascular disease and, 152
 Stroke
 lupus anticoagulant/antiphospholipid syndrome and, 537
 nitric oxide synthase and, 220, 223
 Study population
 identification
 diagnostic test evaluation and, 466
 Substance P
 endocrine tumors of GI tract and, 58, 60-61
 Sun exposure
 skin disease and
 acute adverse effects of sun exposure, 182-85
 carcinogenesis, 186-87
 chronic adverse effects of sun exposure, 185-87
 factors influencing severity of sun damage, 188
 immunologic alterations, 182-83
 introduction, 181
 photoaging, 185
 photoprotection, 188-89
 photosensitivity disorders, 183-85
 sunburn, 182, 189
 sun protection, 188-89
 Surrogacy
 ethics of reproductive technology and, 110
 Synaptic plasticity and morphogenesis
 nitric oxide synthase and, 219
 Syndrome of lung hemorrhage and nephritis
 ANCA-associated
 vasculitis and, 307-8, 310
- T**
- Tachycardia
 high-altitude pulmonary edema and, 267
 ventricular
 implantable cardioverter defibrillator and, 85-87, 90
 Tachypnea
 high-altitude pulmonary edema and, 267
 Tacrin
 Alzheimer's disease and, 395
 T-cell activation
 X-linked severe combined immunodeficiency and, 230-31
 Testicular cancer
 immunotherapy of solid cancers and, 487
 Tetrodotoxin
 cardiac ion channels and, 141
 Thailand
 paroxysmal nocturnal hemoglobinuria and, 6
 Thermal injury
 adverse effect of ultraviolet radiation and, 182
 laparoscopic cholecystectomy complications and, 34-35
 Thoracotomy
 implantable cardioverter defibrillator and, 85-86
 Thrombocytopenia
 lupus anticoagulant/antiphospholipid syndrome and, 533-34, 536, 538, 544
 Thrombomodulin
 endothelium and, 321-22
 Thrombosis
 alcohol relationship to cardiovascular disease and, 152
 endothelium and, 315-29
 high-altitude pulmonary edema and, 278
 lipoprotein(a) and, 423-37
 lupus anticoagulant/antiphospholipid syndrome and, 533-40, 542-45
 Thyroid cancer
 endocrine tumors of GI tract and, 58
 immunotherapy of solid cancers and, 487
- Thyroid-stimulating hormone (TSH)
 nonfunctioning pituitary tumors and, 98-100
 Thyrotropin-releasing hormone (TRH)
 nonfunctioning pituitary tumors and, 97, 102
 Time spent with patient
 placebo effect and, 198
 TIMI 4
 myocardial preconditioning and, 27
 Tissue factor pathway inhibitor (TFPI)
 endothelium and, 323
 Tobacco
 addiction and treatment, 493-503
 Torsades de Pointes
 cardiac ion channels and, 140, 144-45
 Totipotent stem cells
 endocrine tumors of GI tract and, 58
 Transforming growth factors (TGFs)
 endocrine tumors of GI tract and, 58
 Transplantation
 bone marrow
 gene transfer to hematopoietic stem cells and, 11, 14-16, 18
 Transsphenoidal surgery
 Cushing's syndrome and, 443-55
 nonfunctioning pituitary tumors and, 95, 102
 Trench fever
 Bartonella spp. and, 355, 357
 Trimethoprim-dapsone
 pulmonary complications of HIV infection and, 120
 Trimethoprim-sulfamethoxazole (TMP-SMX)
 Bartonella spp. and, 361-62
 pulmonary complications of HIV infection and, 120, 125
 Trimetrexate
 pulmonary complications of HIV infection and, 121
 Trinucleotide instability
 clinical consequences, 207-8
 disorders involving disorders with CAG repeats, 205-6
 fragile X syndrome, 202-4

myotonic dystrophy, 204-5
 introduction, 201-2
 Trocar site incisional hernia
 laparoscopic
 cholecystectomy
 complications and, 35
 Tryptophan
 nicotine addiction and, 502
 Tuberculosis
 pulmonary complications
 of HIV infection and,
 117, 121
 Tumor-infiltrating
 lymphocytes (TILs)
 immunotherapy of solid
 cancers and, 481-88
 Tumor-rejection antigens
 immunotherapy of solid
 cancers and, 481-89
 Tyrosine kinases
 X-linked severe combined
 immunodeficiency and,
 235

U

Ultraviolet radiation (UVR)
 adverse cutaneous effects
 and, 181-89
 intermediate-thickness
 melanoma and, 212
 United States
Bartonella spp. and,
 362-63
 hepatitis E virus and, 263
 intermediate-thickness
 melanoma and, 211-12
 myocardial preconditioning
 and, 21
 nicotine addiction and, 493
 non-insulin-dependent
 diabetes mellitus and, 510
 paroxysmal nocturnal
 hemoglobinuria and, 6
Pneumocystis carinii
 pneumonia and, 117
 pulmonary complications
 of HIV infection and, 121
 ultraviolet radiation and,

186
 Urticaria
 solar
 adverse effect of
 ultraviolet radiation and,
 185
 UV Index
 adverse effect of ultraviolet
 radiation and, 189

V

Vaccines
 hepatitis E virus and, 257,
 264
 immunotherapy of solid
 cancers and, 481
 pulmonary complications
 of HIV infection and, 125
 Valproic acid
 manic depression and, 48
 Vascular cell proliferation
 lipoprotein(a) and, 431-32
 Vascular homeostasis
 nitric oxide in
 atherogenesis and, 365,
 371-72
 Vasculitis
 classification
 antineutrophil
 cytoplasmic antibodies
 and, 303-12
 Vasoactive intestinal peptide
 (VIP)
 endocrine tumors of GI
 tract and, 58
 Vectors
 gene transfer to
 hematopoietic stem cells
 and, 12-18
 Veress needle
 laparoscopic
 cholecystectomy
 complications and, 34
 VIPomas
 endocrine tumors of GI
 tract and, 57, 66

W

WDHHA syndrome

endocrine tumors of GI
 tract and, 66
 Wegener's granulomatosis
 ANCA-associated
 vasculitis and, 303,
 305-6, 309
 Work-sensitive metabolic
 receptors
 fatigue in congestive heart
 failure and, 253

X

Xeroderma pigmentosum
 ultraviolet radiation and,
 184
 X-linked genes
 paroxysmal nocturnal
 hemoglobinuria and, 1,
 5-7
 X-linked severe combined
 immunodeficiency (SCID)
 γ c mutation in
 β c and γ c roles compared,
 234-35
 γ c association with Jak3,
 235
 γ is shared by multiple
 cytokine receptors,
 233-34
 do defects in other
 cytokine receptor chains
 cause SCID, 236
 IL-2 receptor system and
 T-cell activation, 230-31
 implications for diagnosis
 and therapy, 236
 nature of ammac
 mutation, 231-33
 other diseases associated
 with defective cytokine
 receptors, 237
 overview, 229-30

Z

Zygote research
 ethics of reproductive
 technology and, 111-12